

### Abstract

A system for aligning one end of a passenger loading bridge to an aircraft having a doorway is provided. A transmitter is disposed within a space of a side-wall of an aircraft, the side-wall including an inner wall defining an interior surface of the side-wall and an outer wall defining an exterior surface of the side-wall, the inner wall and the outer wall disposed in a spaced-apart arrangement one relative to the other, so as to define the space therebetween. The transmitter is for providing an electromagnetic signal including a homing signal for use during an operation for aligning the one end of the passenger loading bridge to the doorway of the aircraft. A receiver is disposed about a point having a known location relative to the one end of the passenger loading bridge, for receiving the electromagnetic signal transmitted from the transmitter, and for providing an electrical output signal relating to the electromagnetic signal. A bridge controller is provided in electrical communication with the receiver, for receiving the electrical output signal and for providing a control signal relating thereto. A drive mechanism is provided in communication with the bridge controller, for receiving the control signal therefrom, and for driving the one end of the passenger loading bridge in a direction toward the doorway of the aircraft. A kit and method for retrofitting an aircraft is also disclosed.